SERVICE MANUAL
Level 1&2

NOKIA 6303i CLASSIC

RM-638

Transceiver characteristics

Band:
EGSM 900/1800/1900

Display:
QVGA 320x240, up to 16.7 M colors, True Color TFT (active area 2.2")

Camera:
3.2 MPix Full Focus camera with flash LED, 4x digital zoom

Operating System:
Series 40 SPR 9.1 Compact User Interface

Connections:
Bluetooth 2.1 + EDR
2.0 mm DC charger plug
Micro-USB connector (alternative charging)
3.5mm AV connector

Transceiver with BL-5CT battery pack

Talk time	Standby
GSM: Up to 8 hours	GSM: Up to 515 hours (21d)

Note:
Talk times are dependant on network parameters and phone settings

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1. CHANGE HISTORY

Status	Version No.	Date	Comments
Approved	1.0	17.12.2009	First approved version
Approved	2.0	30.4.2010	Exploded view updated

The purpose of this document is to help NOKIA service levels 1 and 2 workshop technicians to carry out service to NOKIA products. This Service Manual is to be used only by authorized NOKIA service suppliers, and the content of it is confidential. Please note that NOKIA provides also other guidance documents (e.g. Service Bulletins) for service suppliers, follow these regularly and comply with the given instructions.

While every endeavor has been made to ensure the accuracy of this document, some errors may exist. If you find any errors or if you have further suggestions, please notify NOKIA using the address below:

Nokia Care Academy
mailto:Service.Manuals@nokia.com

Please keep in mind also that this documentation is continuously being updated and modified, so watch always out for the newest version.

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The availability of particular products may vary by region.

IMPORTANT

This document is intended for use by qualified service personnel only.

3. WARNINGS AND CAUTIONS

Please refer to the phone's user guide for instructions relating to operation, care and maintenance including important safety information. Note also the following:

3.1 Warnings

1. CARE MUST BE TAKEN ON INSTALLATION IN VEHICLES FITTED WITH ELECTRONIC ENGINE MANAGEMENT SYSTEMS AND ANTI–SKID BRAKING SYSTEMS. UNDER CERTAIN FAULT CONDITIONS, EMITTED RF ENERGY CAN AFFECT THEIR OPERATION. IF NECESSARY, CONSULT THE VEHICLE DEALER/MANUFACTURER TO DETERMINE THE IMMUNITY OF VEHICLE ELECTRONIC SYSTEMS TO RF ENERGY.

2. THE HANDPORTABLE TELEPHONE MUST NOT BE OPERATED IN AREAS LIKELY TO CONTAIN POTENTIALLY EXPLOSIVE ATMOSPHERES, EG PETROL STATIONS (SERVICE STATIONS), BLASTING AREAS ETC.

3. OPERATION OF ANY RADIO TRANSMITTING EQUIPMENT, INCLUDING CELLULAR TELEPHONES, MAY INTERFERE WITH THE FUNCTIONALITY OF INADEQUATELY PROTECTED MEDICAL DEVICES. CONSULT A PHYSICIAN OR THE MANUFACTURER OF THE MEDICAL DEVICE IF YOU HAVE ANY QUESTIONS. OTHER ELECTRONIC EQUIPMENT MAY ALSO BE SUBJECT TO INTERFERENCE.

3.2 Cautions

1. Servicing and alignment must be undertaken by qualified personnel only.

2. Ensure all work is carried out at an anti–static workstation and that an anti–static wrist strap is worn.

3. Use only approved components as specified in the parts list.

4. Ensure all components, modules screws and insulators are correctly re–fitted after servicing and alignment.

5. Ensure all cables and wires are repositioned correctly

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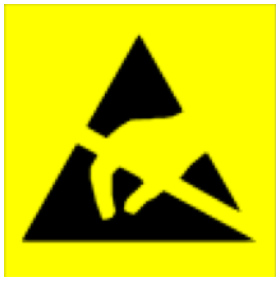
4. ESD PROTECTION



Nokia requires that service points have sufficient ESD protection (against static electricity) when servicing the phone.

Any product of which the covers are removed must be handled with ESD protection. The SIM card can be replaced without ESD protection if the product is otherwise ready for use.

To replace the covers ESD protection must be applied.

All electronic parts of the product are susceptible to ESD. Resistors, too, can be damaged by static electricity discharge.

All ESD sensitive parts must be packed in metallized protective bags during shipping and handling outside any ESD Protected Area (EPA).

Every repair action involving opening the product or handling the product components must be done under ESD protection.

ESD protected spare part packages MUST NOT be opened/closed out of an ESD Protected Area.

For more information and local requirements about ESD protection and ESD Protected Area, contact your local Nokia After Market Services representative.

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5. CARE AND MAINTENANCE

This product is of superior design and craftsmanship and should be treated with care. The suggestions below will help you to fulfil any warranty obligations and to enjoy this product for many years.

- Keep the phone and all its parts and accessories out of the reach of small children.
- Keep the phone dry. Precipitation, humidity and all types of liquids or moisture can contain minerals that will corrode electronic circuits.
- Do not use or store the phone in dusty, dirty areas. Its moving parts can be damaged.
- Do not store the phone in hot areas. High temperatures can shorten the life of electronic devices, damage batteries, and warp or melt certain plastics.
- Do not store the phone in cold areas. When it warms up (to its normal temperature), moisture can form inside, which may damage electronic circuit boards.
- Do not drop, knock or shake the phone. Rough handling can break internal circuit boards.
- Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the phone.
- Do not paint the phone. Paint can clog the moving parts and prevent proper operation.
- Use only the supplied or an approved replacement antenna. Unauthorised antennas, modifications or attachments could damage the phone and may violate regulations governing radio devices.

All of the above suggestions apply equally to the product, battery, charger or any accessory.

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6. BATTERY INFORMATION

Note: A new battery's full performance is achieved only after two or three complete charge and discharge cycles! The battery can be charged and discharged hundreds of times but it will eventually wear out.

When the operating time (talk-time and standby time) is noticeably shorter than normal, it is time to buy a new battery. Use only batteries approved by the phone manufacturer and recharge the battery only with the chargers approved by the manufacturer.

Unplug the charger when not in use. Do not leave the battery connected to a charger for longer than a week, since overcharging may shorten its lifetime.

If left unused a fully charged battery will discharge itself over time Temperature extremes can affect the ability of your battery to charge.

For good operation times with Ni-Cd/NiMh batteries, discharge the battery from time to time by leaving the product switched on until it turns itself off (or by using the battery discharge facility of any approved accessory available for the product).

Do not attempt to discharge the battery by any other means Use the battery only for its intended purpose.

Never use any charger or battery which is damaged.

Do not short-circuit the battery. Accidental short-circuiting can occur when a metallic object (coin, clip or pen) causes direct connection of the + and - terminals of the battery (metal strips on the battery) for example when you carry a spare battery in your pocket or purse. Shortcircuiting the terminals may damage the battery or the connecting object.

Leaving the battery in hot or cold places, such as in a closed car in summer or winter conditions, will reduce the capacity and lifetime of the battery. Always try to keep the battery between 15°C and 25°C (59°F and 77°F).

A phone with a hot or cold battery may temporarily not work, even when the battery is fully charged. Batteries' performance is particularly limited in temperatures well below freezing.

Do not dispose batteries in a fire! Dispose of batteries according to local regulations (e.g. recycling).

Do not dispose as household waste.

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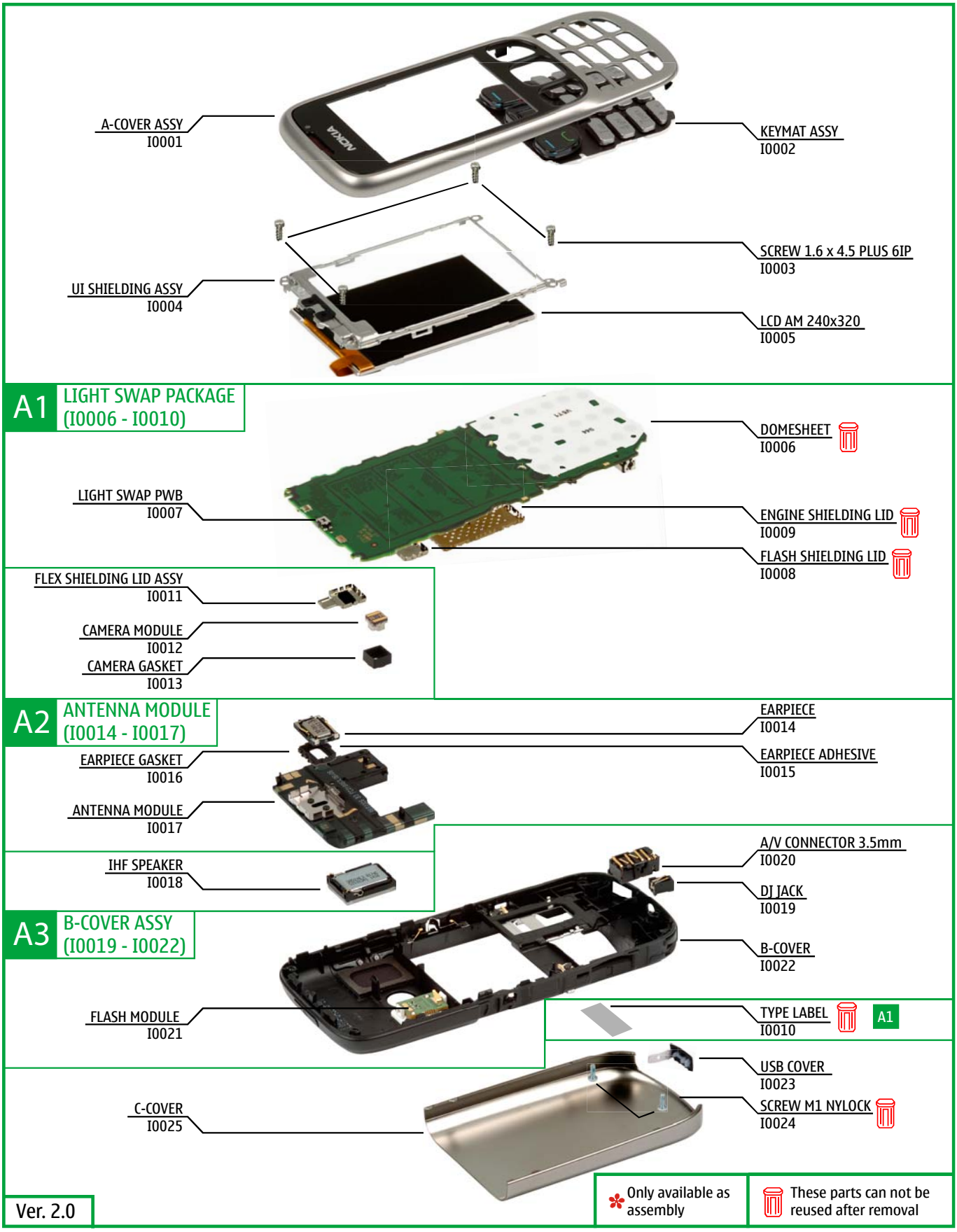
7. EXPLODED VIEW



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8. SERVICE DEVICES

FLS-5 Flash Device	CA-101 Service Cable	AC-8 Travel Charger
BL-5CT Battery	SS-88 Camera removal tool	**NMP standard toolkit (v2)** For more information, refer to the Service Bulletin (SB-011) on NOKIA Online. Supplier or manufacturer contacts for tool re-order can be found in "Recommended service equipment" document on NOKIA Online.

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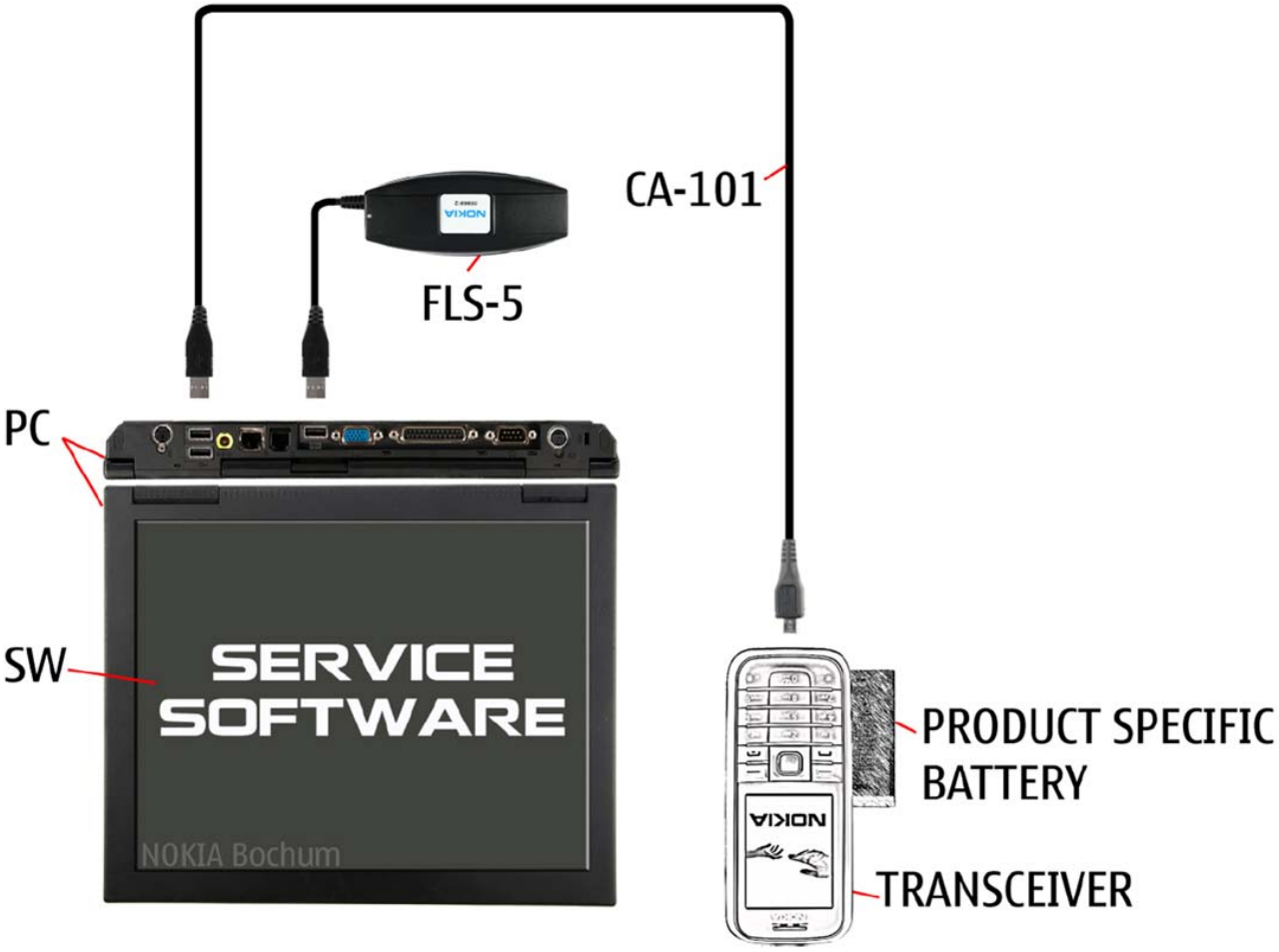
SW-UPDATE

Flash concept (Point of Sales)

To use the FLS-5 Flash Dongle, follow the user guide inside the sales package.
Please check always for the latest version of flash software, wich is available on Nokia Online.



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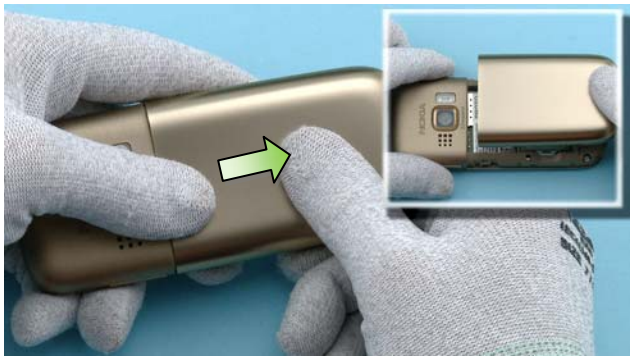
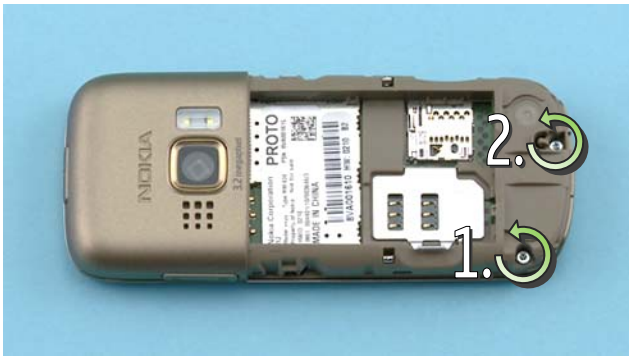
9. DISASSEMBLY INSTRUCTIONS

1) Nokia 6303i Classic disassembly.

2) You must use the Nokia Standard Toolkit version 2. You will also need the SS-88 camera removal tool, a 3.5mm AV plug and a 2mm charger plug.



3) Release the BATTERY COVER by sliding it in the direction shown. Remove the BATTERY COVER. If there is a battery inserted, remove it also.



4) Unscrew the two TORX+ size 6 screws in the order shown. Discard them.

4) Open the USB COVER.

6) Insert the SRT-6 between the A-COVER and B-COVER to release the snaps of the A-COVER. First release the snap on the bottom side of the device.

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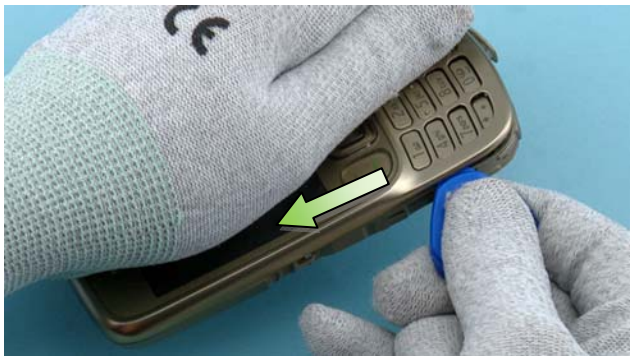
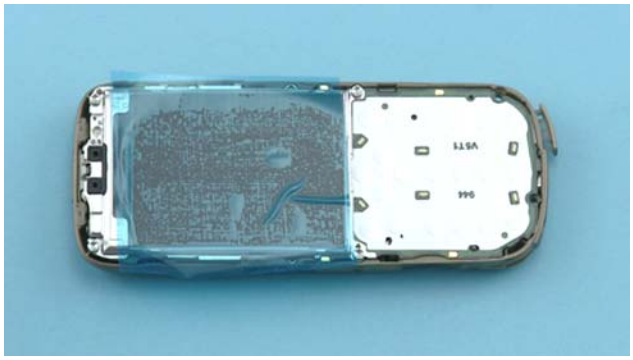


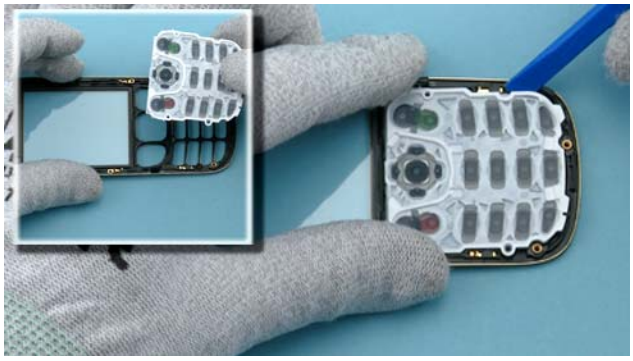
7) Slide the SRT-6 along the edges of the device to release the remaining snaps.

8) Then release the snaps along the edges on the other side of the device.

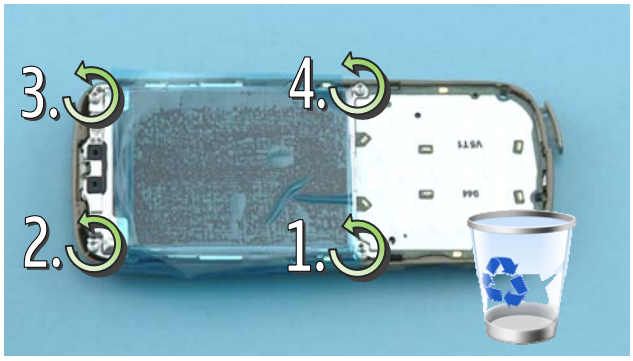
9) Remove the A-COVER and the KEYMAT ASSY.



10) Protect the LCD with a protective film.



11) Use the SS-93 to separate the KEYMAT ASSY from the A-COVER. Remove the KEYMAT ASSY.



12) Unscrew the four TORX+ size 6 screws in the order shown. Discard them.

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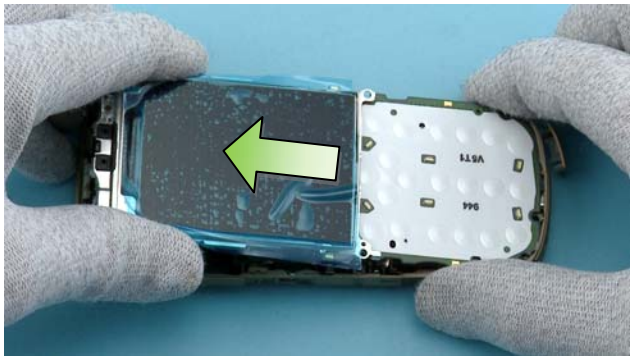
13) Make sure the USB COVER is still open.

14) Use the SS-93 to detach the clips on top side of the device. Be careful not to damage the components on the engine board!



15) Separate the engine board from the B-COVER ASSY by lifting the engine board in the direction shown.

16) Use the tweezers to remove the CAMERA GASKET.

17) Open the clip of the FLEX SHIELDING with the SS-93.

18) Remove carefully the FLEX SHIELDING with the tweezers. The FLEX SHIELDING cannot be used again. Be careful not to damage the components nearby!

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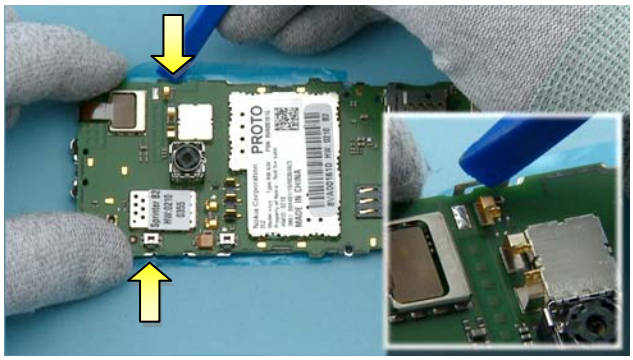
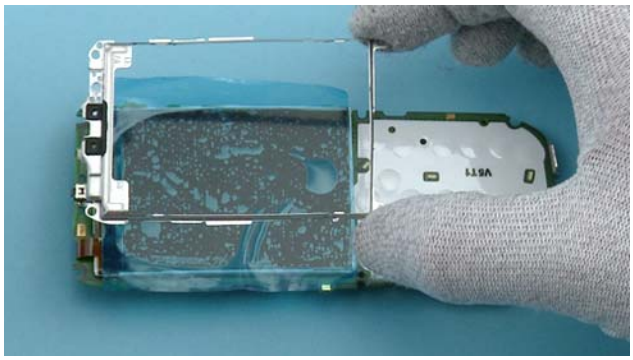
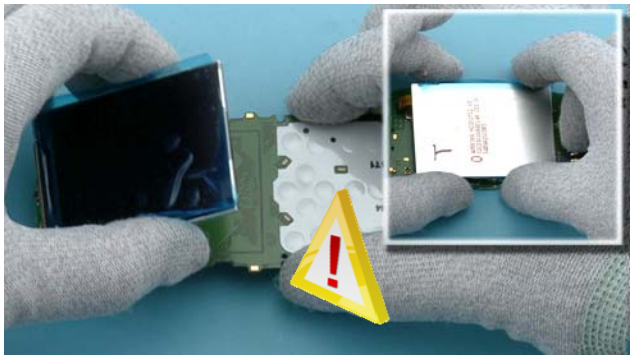


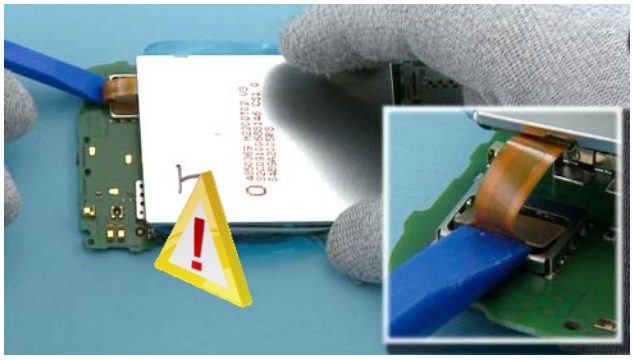
19) Use the SS-93 to release the two clips holding the UI SHIELDING.



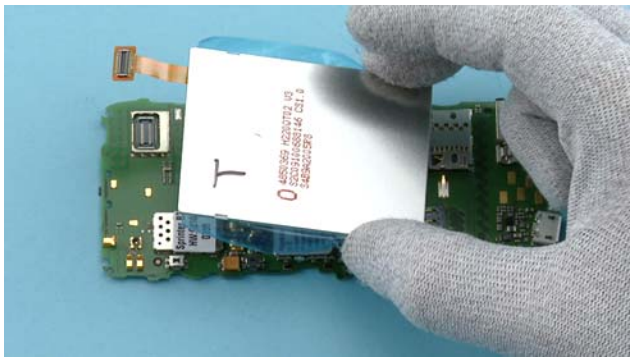
20) Remove the UI SHIELDING.



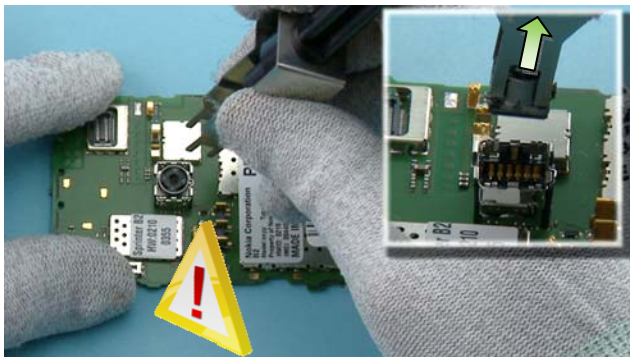
21) Carefully turn over the LCD and place it on the other side of the engine board.



22) Use the SS-93 to open the LCD connector. Be careful not to damage the connector or the components nearby!



23) Remove the LCD.



24) Push down the SS-88 camera removal tool to release the CAMERA retaining clips. Lift up the SS-88 and remove the CAMERA.

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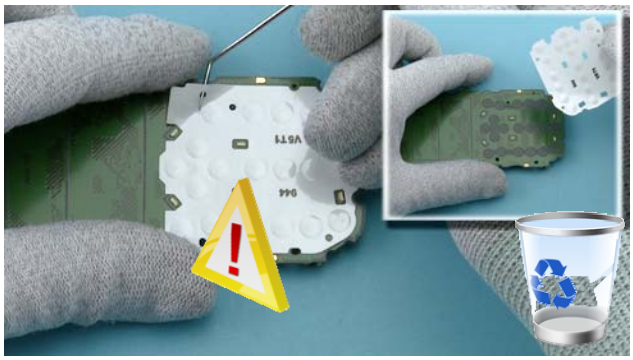
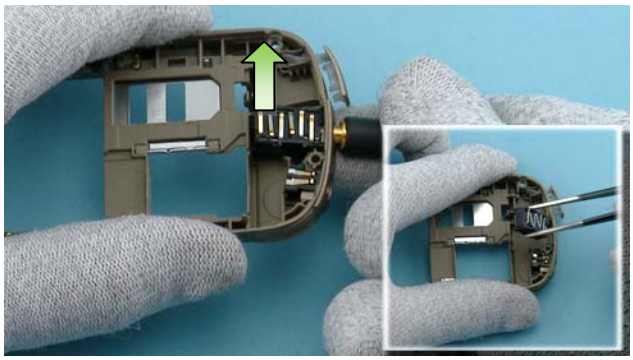
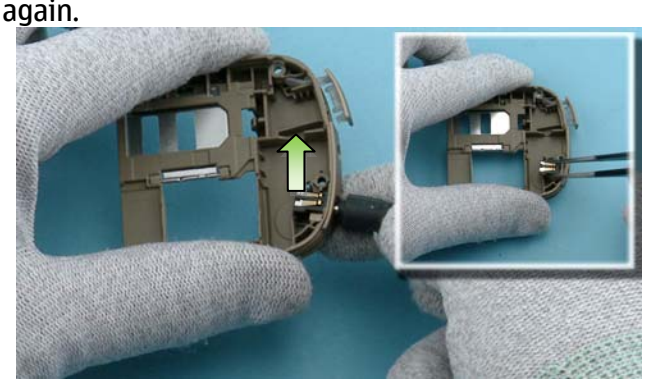


25) Use the dental tool to lift up one corner of the DOMESHEET. Be aware of the sharp point of the dental tool – be careful not to injure yourself! Peel off and remove the DOMESHEET. Do not use it again.

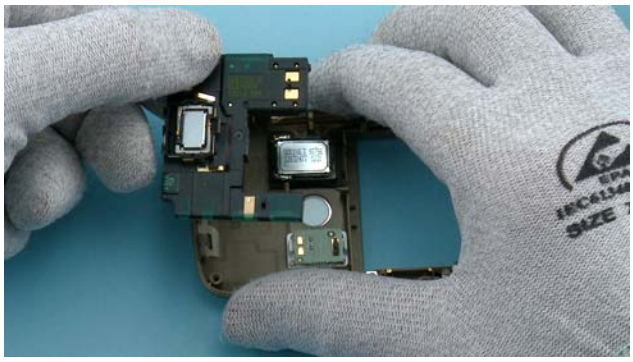


26) Use an AV plug to release the AV JACK. Remove the AV JACK with the tweezers.



27) Release the DC JACK by lifting it up with a DC plug. Remove the DC JACK with the tweezers.

28) Use the SS-93 to lever out the ANTENNA MODULE. Be careful not to damage the IHF GASKET underneath the module!



29) Remove the ANTENNA MODULE.

30) Remove the IHF SPEAKER with the tweezers.

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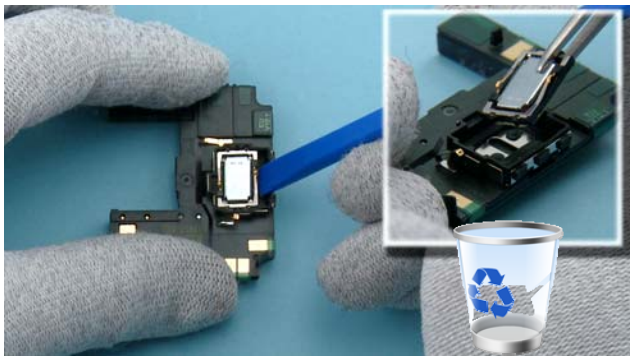
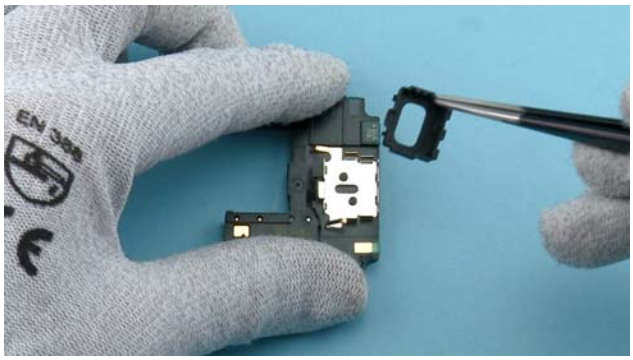


31) Lift up the EARPIECE with the SS-93 and remove it. The EARPIECE ADHESIVE has always to be renewed.



32) Use the tweezers to detach the EARPIECE GASKET.

33) Nokia 6303i Classic disassembly is now complete.

-END OF DISASSEMBLY-

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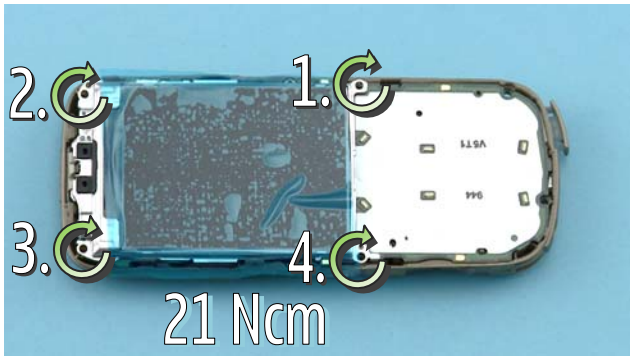
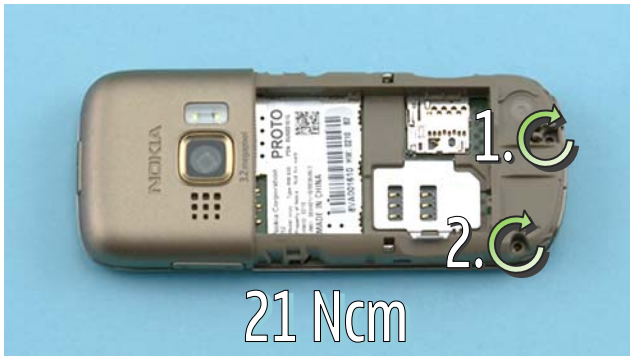
10. ASSEMBLY HINTS



1) Tighten the two TORX + size 6 screws to the torque of 21 Ncm in the order shown.



2) Tighten the four TORX + size 6 screws to the torque of 21 Ncm in the order shown.

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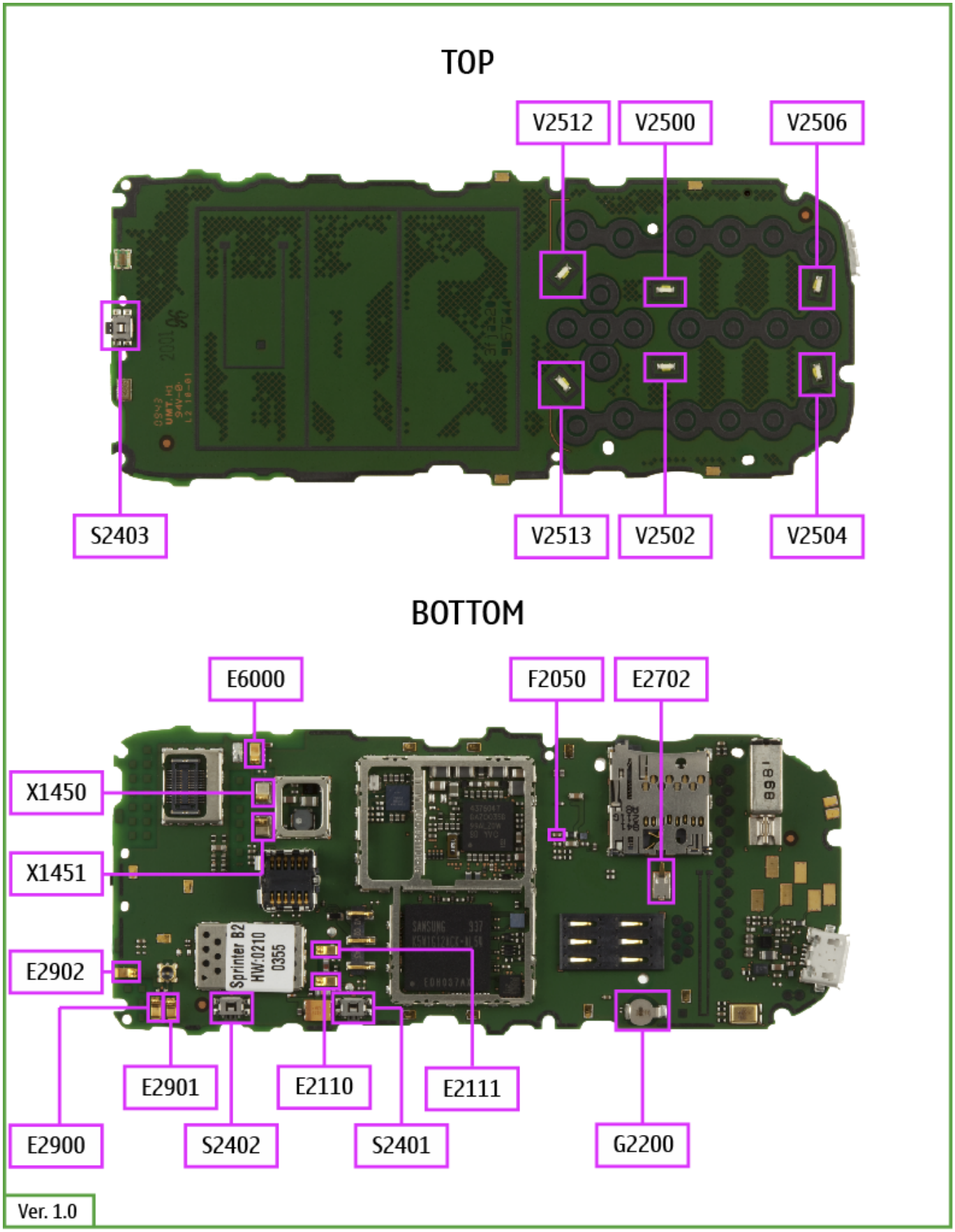
11. SOLDER COMPONENTS



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